

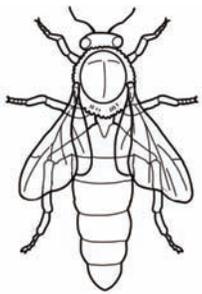
Social bees are bees that live together.

They share the work of building a nest, foraging for food, and caring for young. Honey bees and bumble bees are examples of social bees.

The Life of a Honey Bee

Honey bees live together in a hive. A hive is an above-ground structure where a group of bees nest together. A hive can be made by people (look on the *Managed Bees* page for a picture), or it can be made by bees themselves in the wild. Inside the hive, honey bees use wax to make honeycomb that they use to raise their young and store honey and pollen.

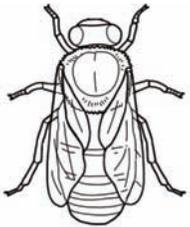
Honey bees living in a hive have a caste system made up of a queen bee, drones, and worker bees. These three types of bees play different roles in the hive.



Queen bee: The queen is the mother of all the bees in the hive. Her job is to lay eggs to make more bees. Typically, she only leaves the hive once in her life to mate.



Worker bees: Worker bees are all female. When they are young, they start off cleaning the hive and then caring for and feeding young larvae. Once they are older, they become foragers, bringing in nectar and pollen to feed the bees in the hive.



Drones: Drones are all male. They are produced in the summer and their job is to mate with queens from other hives.



Honey Bees

Honey bees have a superpower. Can you guess what it is?

They make honey, and they are some of the only bees that can do this!

1. Older worker bees collect nectar from flowers and take it back to the hive. There, they spit out the nectar into an open honeycomb.
2. The worker bees' spit contains special enzymes (chemicals that change molecules). As the nectar sits in the honeycomb, these enzymes make its sugars easier to digest.
3. Young worker bees take turns fanning the nectar with their wings. This causes water in the nectar to evaporate. The nectar becomes sweeter and stickier, turning into honey after a few days. Unlike nectar, which can spoil easily, honey can stay good to eat for a very long time if it is sealed.
4. Worker bees cover the honey in the honeycomb with wax to keep it safe for the winter. The honey will provide all the food the bees need to make it through the winter when no flowers are in bloom and it is too cold to go outside. Storing honey allows honey bees to stay active year round. That is why we sometimes see a honey bee flying on a warm day in December. Because honey bees never "go to sleep," they can be ready to pollinate some of our earliest crops, like almonds.

